

traverses the rejection because the Official Action has not established an anticipation rejection.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Applicant respectfully submits that an anticipation rejection cannot be maintained against the independent claims of the present application. Independent claims 1, 3, 13, 19, 28 and 29 recite removing an entire surface portion of a crystalline semiconductor layer after irradiation. The Official Action now relies on Figure 1 of Yamazaki to allegedly anticipate the present claims. Specifically, the Official Action asserts that Figure 1C and column 13, lines 66-67 of Yamazaki teach removing an entire surface portion of a crystalline semiconductor layer after irradiation (page 3, Paper No. 0506). Also, the Official Action further asserts that an entire side portion (surface portion) is etched to create a semiconductor island (page 6, Id.). The Applicant respectfully disagrees and traverses the above assertions in the Official Action.

Yamazaki teaches that "[t]he silicon film is etched to form an island-like silicon region 105" (column 13, lines 66-67; Figures 1B and 1C). That is, a part of the crystallized silicon film 103 is masked in order to form an island like silicon region. Thus, only a part of the surface portion of the crystalline semiconductor is removed. Yamazaki does not teach removing an entire surface portion of crystallized silicon film 103, either explicitly or inherently.

It is noted that the present claims do not recite that "an entire side portion" of a crystalline semiconductor layer is removed, as apparently asserted in the Official Action. Rather, the present claims clearly recite removing an entire surface portion of a crystalline semiconductor layer after irradiation. Figure 1C of Yamazaki simply does not teach that an entire surface portion of the crystallized silicon film 103 is removed.


The Examiner is reminded that terms in the claims should be interpreted in light of the teachings of the present specification. Specifically, the Applicant notes the disclosure at page 7, lines 9-13, of the specification of the present application, which teaches that an impurity to dope a channel portion is distributed throughout the "entire" crystalline semiconductor layer. As such, the recitation of "removing an entire surface portion of the crystalline semiconductor layer" in the present claims means removing the entire surface portion of a channel forming region in a crystalline semiconductor layer.

In Yamazaki, the surface portion of the channel forming region in the semiconductor layer 103 is not etched, because the island-like silicon region 105 comprising a channel forming region is formed by the etching (see Figure 1C; and column 13, lines 66-67). Hence, Yamazaki appears to teach etching only a part of a semiconductor layer (not the entire semiconductor layer). Therefore, Yamazaki does not teach removing an entire surface portion of a crystalline semiconductor layer after irradiation, either explicitly or inherently.

Since Yamazaki does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,


Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789